

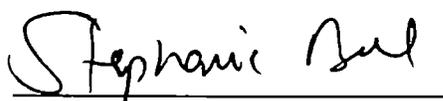
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ALTERNATIVE RATE ADJUSTMENT FILING OF) CASE NO.
HARRISON COUNTY WATER ASSOCIATION) 2015-00308

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of October 12, 2015, the attached report containing the findings of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to paragraphs 2, 3, and 5 of the Commission's October 12, 2015 Order, Harrison County Water Association is required to file written comments regarding the findings of Commission Staff no later than December 30, 2015.



Jeff Derouen
Executive Director
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

DATED DEC 16 2015

cc: Parties of Record

STAFF REPORT
ON
HARRISON COUNTY WATER ASSOCIATION
CASE NO. 2015-00308

Harrison County Water Association ("Harrison County") provides water service to approximately 5,647 customers residing in Bourbon, Harrison, Pendleton, and Scott counties, Kentucky.¹ On September 9, 2015, Harrison County tendered an application to the Commission pursuant to 807 KAR 5:076 requesting to increase its water service rates in order to generate additional annual water sales revenue in the amount of \$255,708, an 11.06 percent increase to pro forma present rate revenues of \$2,312,979. The requested water service rates would increase the cost of 5,000 gallons of water purchased through a 5/8-inch x 3/4-inch meter from \$35.65 to \$39.58 per month, an increase of \$3.93, or 11.02 percent.

In support of its requested rates, Harrison County provided financial exhibits with its Application that were based on the test year ended December 31, 2014. In its application, Harrison County included several adjustments to test-year expenses. Harrison County also provided with its application a billing analysis adjusting test-year revenue that included the increase to water sales from a Purchased Water Adjustment that occurred in January of 2015. These exhibits are shown below in condensed form and indicate that a revenue increase of \$255,707, or 11.06 percent, is warranted.

¹ *Annual Report of Harrison County Water Association to the Public Service Commission for the Calendar Year Ended December 31, 2014 ("2014 Annual Report")* at 12 and 53.

Overall Revenue Requirement and Required Revenue Increase

Pro Forma Operating Expenses	\$ 2,549,625
Plus: Average Annual Principal and Interest Payments on Current Debts	93,869
Additional Working Capital	<u>18,774</u>
Overall Revenue Requirement	2,662,268
Less: Other Operating Revenue	(75,314)
Interest Income	<u>(18,268)</u>
Revenue Required From Rates	2,568,686
Less: Pro Forma Present Rate Service Revenues	<u>(2,312,979)</u>
Required Revenue Increase	<u>\$ 255,707</u>
Percent Increase	<u>11.06%</u>

Staff performed a limited financial review of Harrison County's operations for the test year ended December 31, 2014, to determine the reasonableness of Harrison County's requested water rates. The scope of Staff's review was limited to determining whether operations reported for the test year were representative of normal operations. Known and measurable changes to test-year operations were identified and adjustments were made when their effects were deemed to be material. Insignificant or immaterial discrepancies were not pursued and were not addressed.

Staff's findings are summarized in this report. Ariel Miller reviewed the calculation of Harrison County's Overall Revenue Requirement. Jason Green reviewed reported revenues and rate design.

Summary of Findings

1. Overall Revenue Requirement and Required Revenue Increase. Staff found that Harrison County can justify a total Overall Revenue Requirement of \$2,681,192, and that a water revenue increase of \$252,493, or 10.81 percent, above

the pro forma present rate water revenues of \$2,335,117 calculated by Staff, is necessary to generate the Overall Revenue Requirement.

2. Water Rates. The Commission has previously found that the allocation of a revenue increase evenly across the board to a utility's current rate design is appropriate when there has been no evidence entered into the record demonstrating that this method is unreasonable. Finding no such evidence in this case, Staff followed the method proposed by Harrison County and allocated the \$252,493 revenue increase evenly across the board to Harrison County's current rate design.

3. Depreciation. As set out in Attachment B of this report, Staff finds that the depreciable lives assigned to certain assets should be changed for ratemaking purposes and that these lives should be used for accounting purposes in all future reporting periods. These recommended depreciable lives better match the life expectancy of Harrison County's assets and will better match expenses to revenues. No adjustment to accumulated depreciation and retained earnings should be made to account for the effect of this change in accounting estimate.

Pro Forma Operating Statement

Harrison County's Pro Forma Operating Statement based on test-year operations ended December 31, 2014, as determined by Staff, is shown below:

	Test Year	Adjustment (Ref.)	Pro Forma
Operating Revenues			
Water Sales Revenue	\$ 2,231,628	\$ 17,741 (A)	
		85,748 (B)	\$ 2,335,117
Other Water Revenue	44,834		44,834
Total Operating Revenues	2,276,462	103,489	2,379,951
Operating Expenses			
Operation and Maintenance Expenses			
Salaries and Wages - Employees	360,968	10,829 (C)	371,797
Salaries and Wages - Commissioners	12,600		12,600
Employee Pensions and Benefits	159,889		159,889
Purchased Water	1,109,568	80,862 (D)	
		(74,283) (E)	1,116,147
Purchased Power for Pumping	84,010	(5,242) (E)	78,768
Materials and Supplies	79,852		79,852
Contractual Services - Accounting	17,400		17,400
Contractual Services - Legal	2,804		2,804
Contractual Services - Other	90,808		90,808
Transportation Expenses	48,519		48,519
Insurance	31,606		31,606
Bad Debt	18,559		18,559
Miscellaneous Expense	43,328		43,328
Total Operation and Maintenance Expenses	2,059,911	12,166	2,072,077
Taxes Other Than Income	32,671	828 (C)	33,499
Depreciation	466,323	(3,350) (F)	462,973
Total Operating Expenses	2,558,905	9,644	2,568,549
Net Operating Income	(282,443)	93,845	(188,598)
Interest Income	18,268		18,268
Nonutility Income	30,480		30,480
Income Available to Service Debt	\$ (233,695)	\$ 93,845	\$ (139,850)

(A) Billing Analysis Adjustment. Harrison County provided a billing analysis showing the gallons of water billed to retail customers during the test year.² Applying the water service rates that were in effect during the test year to the water sales shown in the billing analysis, Staff determined that a billing analysis adjustment is appropriate that increases test-year revenues by \$17,741. Staff recalculated test-year normalized revenues from retail sales to be \$2,335,117.

(B) Purchased Water Adjustment. Subsequent to the test year, the Commission, pursuant to 807 KAR 5:068, authorized Harrison County to increase its water rates in order to pass through the wholesale water rate increase of the city of Cynthiana.³ By applying the retail rates authorized by the Commission to the applicable water sales shown in the billing analysis provided in Harrison County's supplemental filing, Staff determined that an adjustment of \$85,748 should be made to increase test-year revenues.

(C) Salaries and Wages. During the test year, Harrison County reported \$360,968 for test-year salaries and wages expense. In its application, Harrison County requested to increase this amount by \$10,829 to account for a 3 percent wage rate increase that was approved by Harrison County's Board of Directors on March 18, 2015, for all employees and became effective on April 1, 2015. Further, Harrison County proposed to increase test-year Taxes Other Than Income by \$828 to account

² On October 6, 2015, Harrison County supplemented its application with a revised billing analysis that included the increase to sales revenue from a Purchased Water Adjustment that occurred in January 2015.

³ Case No. 2015-00029, *Purchased Water Adjustment Filing of Harrison County Water Association* (Ky. PSC Jan. 23, 2015).

for the increase to test-year payroll taxes that will result from the wage rate increase. Staff agrees with the adjustments proposed by Harrison County and increased test-year expenses accordingly.

(D) Changes to Wholesale Purchase Water Rates. During the test year, Harrison County purchased wholesale water for resale from Kentucky American Water Company, Nicholas County Water District, and the cities of Cynthiana, Paris, and Millersburg. Effective January 1, 2015, the city of Cynthiana increased the wholesale water rate charged to Harrison County from \$2.41 per thousand gallons to \$2.63 per thousand gallons.

In its Application, Harrison County proposed to increase test-year Purchased Water expense by \$80,862 to account for effects of the wholesale water rate increase. Staff agrees with Harrison County's adjustment and increased test-year Purchased Water expense by \$80,862.

(E) Water Loss. Pursuant to 807 KAR 5:066, Section (6)3, Harrison County's water loss is limited to 15 percent for ratemaking purposes unless it can demonstrate that an alternative level is reasonable. During the test year, Harrison County reported water loss at 21.24 percent, or 6.24 percent above the amount allowed. Harrison County did not attempt to demonstrate that the amount of excess water loss is reasonable. Instead, it proposed to decrease test-year purchased water expense and its test-year purchased power by \$74,283 and \$5,242, respectively, to remove the cost of the excess water loss. Staff agrees with the proposed adjustments and reduced test-year purchased water and purchased power by \$74,283 and \$5,242, respectively.

(F) Depreciation. Harrison County reported \$466,323 for test-year depreciation expense. This amount was calculated using the straight-line method, pursuant to which the plant's original cost is divided by its estimated useful life. A summary of Staff's review of the estimated useful lives is found at Attachment B of this report. To account for the effects of the changes to the lives recommended in Attachment B, Staff decreased test-year depreciation by \$3,350, as calculated below:

Asset	Original Cost	Divide by: Staff Useful Life	Pro Forma Depreciation
328 - Other Pumping Plant	\$ 19,589	25	\$ 784
331 - Structures and Improvements	4,700	35	134
341 - Structures and Improvements	1,050	35	30
342 - Reservoirs and Tanks	29,767	30	992
343 - Transmission and Distribution Mains	163	50	3
346 - Meters	3,999	35	114
391 - Office Furniture and Equipment	1,524	20	76
392 - Transportation Equipment	6,549	7	936
394 - Tools, Shop, & Garage Equipment	66,213	15	4,414
396 - Power Operated Equipment	2,932	15	195
397 - Communications Equipment	59,240	10	<u>5,924</u>
Pro Forma			13,603
Less: Test-Year Depreciation on Assets Listed in the Adjustment			<u>(16,953)</u>
Decrease			<u>\$ (3,350)</u>

Overall Revenue Requirement and Required Revenue Increase

Harrison County and Staff used the Debt Service Coverage (“DSC”) method, as generally accepted by the Commission, to calculate the Overall Revenue Requirement. This method allows for recovery of: 1) cash related pro forma operating expenses; 2) recovery of depreciation expense, a non-cash item, to provide working capital;⁴ 3) the average annual principal and interest payments on all long-term debts; and 4) working capital that is in addition to depreciation expense.

A comparison of Harrison County's and Staff's calculation of the Overall Revenue Requirement and Required Revenue Increase is shown below:

⁴ The Kentucky Supreme Court has held that the Commission must permit a water district to recover its depreciation expense through its rates for service to provide internal funds to be used for renewing and replacing assets. *See Public Serv. Comm'n of Kentucky v. Dewitt Water Dist.*, 720 S.W.2d 725, 728 (Ky.1986). Although a water district's lenders require that a small portion of the depreciation funds be deposited annually into a debt reserve/depreciation fund until the account's balance accumulates to a required threshold, neither the Commission nor the Court requires that revenues collected for depreciation be accounted for separately from the water district's general funds or that depreciation funds be used only for asset renewal and replacement. The Commission has recognized that the working capital provided through recovery of depreciation expense may be used for purposes other than renewal and replacement of assets. *See Case No. 2012-00309, Application of Southern Water and Sewer District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Dec. 21, 2012).

	Harrison County	Staff
Pro Forma Operating Expenses	\$2,549,625	\$ 2,568,549
Plus: Average Annual Principal and Interest Payments on Current Debts Additional Working Capital	93,869 18,774	93,869 18,774
Overall Revenue Requirement	2,662,268	2,681,192
Less: Other Operating Revenue	(75,314)	(44,834)
Interest Income	(18,268)	(18,268)
Non-Operating Revenue		(30,480)
Revenue Required From Rates	2,568,686	2,587,610
Less: Pro Forma Present Rate Service Revenues	(2,312,979)	(2,335,117)
Required Revenue Increase	\$ 255,707	\$ 252,493
Percent Increase	11.06%	10.81%

1. Average Principal and Interest Payments on Current Debts. Harrison County currently has outstanding loans payable to the United States Department of Agriculture Rural Development ("RD"). In its Application, Harrison County requested recovery of the three-year average principal and interest payments that will become due in 2016, 2017, and 2018 on all loans that were used to finance the cost of water system improvement projects. Staff agrees that the \$93,869 requested by Harrison County represents, in all material respects, the average annual debt payments that will be made on Harrison County's long-term debts in each year that the water rates approved by the Commission in this proceeding will be in effect.

2. Additional Working Capital. The DSC method, as historically applied by the Commission, includes an allowance for additional working capital that is equal to the minimum net revenues required by Harrison County's lenders that are above its average annual debt payments. In this case, RD requires that Harrison County charge rates that produce net revenues that are at least 120 percent of its average annual bond payments. Following the Commission's historical practice, Staff calculated Harrison County's allowance for additional working capital to be \$18,774, as shown below.⁵ Staff included this amount in the calculation of Harrison County's Overall Revenue Requirement.

⁵ Inclusion of the additional working capital in Harrison County's revenue requirement is not necessary for it to earn revenues that meet the minimum DSC ratio required by its lenders. As depreciation is a noncash item, it is excluded from the ratio calculation, which is actually a measure of cash flow. As shown below, Harrison County's minimum DSC ratio is met with or without the inclusion of additional working capital.

	With Additional Working Capital	Without Additional Working Capital
Overall Revenue Requirement	\$ 2,681,192	\$ 2,662,419
Less: Operating and Maintenance Expense	(2,072,077)	(2,072,077)
Taxes Other Than Income	(33,499)	(33,499)
	<hr/>	<hr/>
Net Revenues	575,616	556,843
Divided by: Average Annual Debt Payments	93,869	93,869
	<hr/>	<hr/>
DSC Ratio	613%	593%
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Average Annual Principal and Interest	\$ 93,869
Times: DSC Coverage Ratio	<u>120%</u>
Total Net Revenues Required	112,643
Less: Average Annual Principal and Interest Payments	<u>(93,869)</u>
Additional Working Capital	<u>\$ 18,774</u>

Signatures

Ariel Miller

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 Financial Analyst, Water and Sewer
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Jason Green

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ATTACHMENT A

STAFF REPORT CASE NO. 2015-00308
RATES CALCULATED BY STAFF

Monthly Rates

5/8- X 3/4-Inch Meter

First 2,000 Gallons	\$18.63 Minimum Bill
Next 1,000 Gallons	6.96 Per 1,000 Gallons
Next 2,000 Gallons	6.78 Per 1,000 Gallons
Next 45,000 Gallons	6.23 Per 1,000 Gallons
Over 50,000 Gallons	5.30 Per 1,000 Gallons

3/4-Inch Meter

First 3,000 Gallons	\$25.59 Minimum Bill
Next 2,000 Gallons	6.78 Per 1,000 Gallons
Next 45,000 Gallons	6.23 Per 1,000 Gallons
Over 50,000 Gallons	5.30 Per 1,000 Gallons

1-Inch Meter

First 5,000 Gallons	\$39.15 Minimum Bill
Next 45,000 Gallons	6.23 Per 1,000 Gallons
Over 50,000 Gallons	5.30 Per 1,000 Gallons

1 1/2-Inch Meter

First 10,000 Gallons	\$70.30 Minimum Bill
Next 40,000 Gallons	6.23 Per 1,000 Gallons
Over 50,000 Gallons	5.30 Per 1,000 Gallons

2-Inch Meter

First 15,000 Gallons	\$101.45 Minimum Bill
Next 35,000 Gallons	6.23 Per 1,000 Gallons
Over 50,000 Gallons	5.30 Per 1,000 Gallons

Bulk Loading Station

\$7.57 Per 1,000 Gallons

ATTACHMENT B

STAFF REPORT, CASE NO. 2015-00308
HARRISON COUNTY WATER ASSOCIATION

ENGINEERING DIVISION'S
ANALYSIS OF ASSET SERVICE LIVES
FOR WATER SYSTEMS

Historically, the Commission has relied on the *Depreciation Practices for Small Water Utilities* by the National Association of Regulatory Utility Commissioners ("NARUC"), Washington, D. C., August 15, 1979 ("Study"), page 11, to evaluate the reasonableness of a utility's depreciation practices. This Study outlines expected service life ranges for various asset groups designed, installed, and maintained in accordance with good water utility practices. Typically, an adjustment is made when the Commission finds that a utility is proposing to use a service life that falls outside of the range, while service lives falling within these ranges are generally accepted.

Certain asset service lives submitted in this case were found to be outside the ranges in the NARUC Study or guidelines previously adopted by the Commission. The following table identifies the service lives submitted outside the Commission's established guidelines:

NARUC Account Number	Type of Asset	NARUC Average Service Life	Submitted Service Life/Lives	Recommended Staff Report Service Life/Lives
328	Other Pumping Plant	25	38, 20	25
331	Structures and Improvements	35-40	20	35
341	Structures and Improvements	35-40	30	35
342	Reservoirs and Tanks	30-60	20, 30	30
343	Transmission and Distribution Mains	50-75	30, 50, 63	50, 63
346	Meters	35-45	20, 35	35
391	Office Furniture and Equipment	20-25	23, 7, 5	23, 20
392	Transportation Equipment	7	7, 5	7
394	Tools, Shop & Garage Equipment	15-20	7, 13, 10	15
396	Power Operated Equipment	10-15	20, 30	15
397	Communications Equipment	10	20, 30, 10, 18, 7	10

NOTE: Some Types of Assets had more than one service life submitted. In these cases, service life/lives that were within the NARUC range shall remain unchanged.

The Recommended Staff Report Service Life/Lives shall be used for the purpose of the Commission Staff Report unless specific and verifiable evidence supports using alternative service lives.

Prepared December 16, 2015

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